

CLAIM AMENDMENTS

1. (canceled)

1 2. (currently amended) The rotating heat exchanger
2 according to claim [[24]] 10, further comprising
3 peripheral seals between the periphery of the rotor on
4 the one hand and the housing on the other hand.

1 3. (currently amended) The rotating heat exchanger
2 according to claim 2, wherein the peripheral seals are fixed to the
3 housing.

1 4. (currently amended) The rotating heat exchanger
2 according to claim [[24]] 10 wherein the means for pressurizing
3 maintains pressure of the housing or sealing air at a constant
4 pressure level.

1 5. (currently amended) The rotating heat exchanger
2 according to claim [[24]] 10 wherein the means for pressurizing
3 maintains pressure of the housing or sealing air at a constant
4 differential pressure above the pressure of the airflows flowing
5 through the rotor.

6. (canceled)

1 7. (currently amended) The rotating heat exchanger
2 according to claim [[24]] 10, further comprising
3 a control and regulating device for operating the
4 pressure source according to an output signal of a pressure sensor
5 measuring the pressure in the housing or a pressure sensor
6 measuring the pressure of the airflows flowing through the rotor.

1 8. (currently amended) The rotating heat exchanger
2 according to claim [[24]] 10 wherein the means for pressurizing
3 pressurizes the housing with non-critical housing or sealing air.

9. (canceled)

1 10. (currently amended) A rotating regenerative heat
2 exchanger comprising:
3 a heat-exchange rotor rotatable about an axis and having
4 axially oppositely directed front and rear end faces and an outer
5 periphery;
6 a housing surrounding the rotor and defining a first flow
7 sector for axial front-to-rear flow through the rotor of air from
8 the exterior and, angularly offset from the first sector a second
9 flow sector for axial rear-to-front flow through the rotor of air
10 to the exterior;
11 means for pressurizing the housing around the periphery
12 of the rotor with housing air ~~at a superatmospheric pressure;~~

13 front and rear separators fixed in the housing,
14 juxtaposed with the respective end faces of the rotor, and
15 extending diametrally of the rotor between the sectors;
16 means for projecting sealing air from the separators and
17 thereby preventing mixing of air between the sectors; and
18 a purging wedge-like device connected to the housing and
19 able to be supplied with a purging airflow from the means for
20 pressurizing at the end face of the rotor in the region of the
21 first flow sector and immediately upstream in a rotation direction
22 of the rotor of the second flow sector.

1 11. (currently amended) The rotating heat exchanger
2 according to claim [[24]] 10, further comprising
3 a temperature-regulating device by means of which the
4 housing or sealing air can be temperature-regulated.

1 12. (currently amended) The rotating heat exchanger
2 according to claim [[24]] 10 wherein the pressurizing means draws
3 housing or sealing air from the airflow of the first sector.

13 - 14. (canceled)

1 15. (currently amended) The method according to claim
2 [[25]] 26 wherein the pressure level of the housing or sealing air
3 in the housing is kept constant.

4 16. (currently amended) The method according to claim
5 [[25]] 26 wherein the pressure level of the housing or sealing air
6 in the housing is kept above the pressure level of the airflows
7 flowing through the rotor by a constant differential pressure.

1 17. (currently amended) The method according to claim
2 [[25]] 26 wherein the pressure level of the housing or sealing air
3 in the housing is controlled or regulated in dependence on the
4 pressure level in the housing or the pressure level of the
5 airflows flowing through the rotor.

1 18. (currently amended) The method according to claim
2 [[25]] 26 wherein the housing is pressurized with noncritical
3 housing or sealing air.

19 - 20. (canceled)

1 21. (currently amended) The method according to claim
2 [[25]] 26 wherein the housing or sealing air is temperature-
3 regulated.

1 22. (currently amended) The method according to claim
2 [[25]] 26 wherein the housing or sealing air is taken from the
3 supply air and/or external air system of the rotating heat
4 exchanger.

23 - 25. (canceled)

1 26. (currently amended) A method of operating a
2 regenerative heat exchanger having:

3 a heat-exchange rotor rotatable about an axis and having
4 axially oppositely directed front and rear end faces and an outer
5 periphery;

6 a wedge-like purging device on the rotor;

7 a housing surrounding the rotor and defining a first flow
8 sector and, angularly offset from the first sector a second flow
9 sector; and

10 front and rear separators fixed in the housing,
11 juxtaposed with the respective end faces of the rotor, and
12 extending diametrally of the rotor between the sectors,
13 the method comprising the steps of:

14 flowing air from the exterior axially front-to-rear
15 through the first sector of the rotor;

16 flowing air to the exterior axially axial rear-to-front
17 through the second sector of the rotor of air;

18 pressurizing the housing around the periphery of the
19 rotor with housing air ~~at a superatmospheric pressure~~;

20 projecting sealing air from the separators and thereby
21 preventing mixing of air between the sectors; and

22 supplying housing or sealing air to the wedge-like device
23 of the rotor from the housing as purging air.